REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-16 and 18-30 are pending, Claims 1-14 having been withdrawn from consideration, Claim 17 having been canceled previously, and Claim 15 amended by way of the present amendment. The amendment to Claim 15 has been made to address an informality, and thus no new matter is added.

In the outstanding Office Action Claims 15-16 and 17-30 were rejected under 35 U.S.C. § 112, second paragraph; Claims 15-16 were rejected as being obvious over Perez (U.S. Patent No. 6,542,791, in view of the Admitted Prior Art; likewise Claim 18 has been rejected as being unpatentable over Perez/Admitted Prior Art and Edelman et al. (U.S. Patent No. 6,281,601, hereinafter "Edelman"); Claims 19-27 were rejected as being obvious over Perez/Admitted Prior Art in view of Takriti (U.S. Patent No. 6,021,402); and Claims 28-30 were rejected as being obvious over Perez/Admitted Prior Art and in further view of Pitchford et al. (U.S. Patent No. 6,327,541, hereinafter "Pitchford").

Claim 15 has been amended consistent with 35 U.S.C. § 112, second paragraph. No new matter is added.

Claim 15 is directed to a method for coordinating power output from a renewable power production facility with another power production facility so as to implement "a virtual energy storage mechanism" for the renewable power production facility. The renewable production facility produces a variable amount of electric power and the another power production facility produces a controllable amount of electric power. The method determines that the amount of power produced by the renewable power production facility deviates from a threshold by a predetermined quantity, and informs the another power production facility of the predetermined quantity. A power output of the another power

production facility is adjusted by the predetermined quantity. Finally, an account balance is kept in a memory of an amount of energy to later be produced by the another power production facility of on behalf of the renewable power production facility.

It is through this account balance that is kept in memory of the amount of energy to later be produced on behalf of the renewable power production facility that gives rise to the "virtual energy storage mechanism", as claimed. Moreover, because the renewable power production facility produces a variable amount of electric power, the renewable power production facility may not always be able to generate a particular "threshold" amount of power. The invention defined by Claim 15 solves the problem of the renewable's variable amount of power by (1) informing the another power production facility of the predetermined quantity needed to reach the threshold, (2) adjust the power output of the another power production facility, and (3) keeps an account balance in memory of the amount of energy to be later produced by the another power production facility on behalf of the renewable power production facility.

Therefore, in addition to the coordination between the two power production facilities to meet a predetermined threshold for applying power to the power grid, the claim also covers the notion that the amount of energy produced by the another power production facility on behalf of the renewable power production facility is essentially a "loan" made for the renewable power production facility to be repaid at a later time. Moreover, the renewable power production facility ultimately would have to account for this "loan" (power deficit) by producing more power at a later time in order to clear the amount balance.

The outstanding Office Action asserts that Perez discloses all of the elements of amended Claim 15 except for the last step of keeping the account balance. Applicants respectfully traverse this assertion. Perez is directed to a system that controls the load, and purposely avoids coordination with another power production facility to meet threshold

requirements (column 2, lines 64-66). Moreover, when the photovoltaic power supply of Perez falls short of its power production mark, the load is adjusted so as to offset the reduced power produced by the photovoltaic source. There is no coordination between the photovoltaic source and the power grid because Perez relies on the control of the load to account for any energy production deficit of the photovoltaic source (column 5, lines 13-18). Moreover, Perez expressly states that "rather than supplying stored or backup energy to compliment a photovoltaic array when needed to guarantee a high ELCC, the same effect is achieved in accordance with the principles of the present invention by controlling the load energy by an amount equal to the amount that would otherwise be needed to guarantee a desired effective capacity".

The Office Action also asserts that Perez discloses the step of "informing said another power production facility of said predetermined quantity". However Perez does not operate on this principle and provides no teaching of this claimed step. Likewise Perez is devoid of any teaching of adjusting the power output of the other power production facility by a predetermined quantity, after the another power production facility has been informed about the predetermined quantity. Moreover, Perez operates on a completely opposite concept where no coordination is required because the load controller controls the size of the load to compensate for any shortfall for power produced by the renewable power source. Therefore, it is respectfully submitted that Perez neither teaches nor suggests any of the steps regarding the determining of the variable amount of power, informing the another power production facility of the predetermined quantity, and adjusting the power output of the another power production facility by the predetermined quantity.

The outstanding Office Action recognizes that Perez does not perform the last claim step in Claim 15, namely keeping the account balance. The Office Action asserts that the Admitted Prior Art teaches this last step, and cites pages 6-9 and Figures 2-3. However,

these passages in the specification merely explain how a contract network works and how a daily flow of information exists in the electricity market. Generally, there is no coordination with renewable power source providers and the market. Rather, the renewable power sources simply apply their power to the grid and are later compensated for such contributions. This is completely different than the controllable power producers which participate in the market shown in Figure 3, for example, for producing and delivering power according to contracts. While balancing operators operate to make up for any shortfall at the network level, these balancing providers are not in any type of coordination with the renewable power production facility(s), but merely provide sources of balancing power so that particular loads may be accommodated even though the loads are varying. The market in Figure 3 of the present application describes a coordination at the network level between various power providers and a system operator so as to meet continuing electrical power demands. Nothing about Figure 3 of the Admitted Prior Art describes the "keeping an account balance in a memory of an amount of energy to later be produced by the another power production facility on behalf of the renewable power production facility". There is no such coordination in the Admitted Prior Art. Moreover, the market for electrical power providers simply has the renewable power production facilities generate the power in advance, and then that energy is combined with a number of other controllable power production sources, and any short term falls or gain are adjusted by a balance provider. No account balance is made on behalf of a renewable power production facility.

Accordingly, as discussed above, Perez describes a system that is essentially opposite to that which is presently claimed; Perez describes a system that controls a load without coordinating with another power production facility, and the Admitted Prior Art merely describes existing electricity markets. None of the references teach or suggest "keeping an account balance", as claimed, nor the coordination between the renewable power production

facility and the another power production facility as claimed in the determining and informing steps. Accordingly, it is respectfully submitted that even if Perez and the Admitted Prior Art could be combined in any reasonable manner, the combination still would not teach or suggest all of the elements of Claim 15.

KSR imposes an "articulated reasoning" basis by which obviousness rejections could be made. It is respectfully submitted that the reasoning provided in the outstanding Office Action is purely speculative, and even if such reasoning was correct, it would result in a system that is contrary to the principle operations of Perez (load controlling) and the Admitted Prior Art of Figure 3 (energy market). One of the principle concepts in KSR is that the Office cannot use Applicants' own disclosure as a roadmap for combining prior art references to arrive at a claimed invention. However, the Office Action is proposing to substantially modify the principle operation of both Perez and the Admitted Prior Art in order to arrive at the presently claimed invention. Such reasoning is not one of the accepted 7 reasons under KSR (MPEP 2141 III). Moreover, the process described in Claim 15 is completely contrary to normal operations for the electricity market shown in Figure 3, as well as load controlling systems such as that described in Perez. MPEP 2146.2 explains that it is improper to combine references where a reference teaches away from the invention. In this case Perez teaches away from coordinating with another power source, because Perez adjusts the load, not the power input. Likewise, the AAPA describes a market in which renewables do not participate, yet the Office Action improperly asserts the opposite. As such, it is respectfully submitted that Claim 15 patentably defines over the asserted prior art.

Likewise, even if the Admitted Prior Art is taken as a primary reference, it too falls short of teaching all the elements of Claim 15 even if combined with the teachings of Perez, for the reasons discussed above.

It is respectfully submitted that none of the ancillary or tertiary references associated with the other dependent claims cure the deficiency with regard to Claim 15 and Perez and the Admitted Prior Art as discussed above. Consequently, it is respectfully submitted that Claims 16 and 18-30 also patentably define over the asserted prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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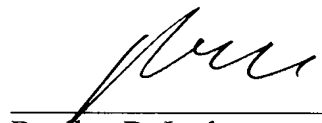

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